

RF EXPOSURE REPORT

Reference No..... : WTX26X05136213W004
FCC ID..... : 2AKIT-CHC33
Applicant..... : Lumi United Technology Co., Ltd
Address..... : B1, Chongwen Park, Nanshan iPark, Liuxian Avenue, Taoyuan Residential
District, Nanshan District, Shenzhen, China
Manufacturer..... : The same as Applicant
Address..... : The same as Applicant
Product Name..... : Camera G510 (Battery)
Model No..... : CH-C33D
Standards..... : FCC Rule Part 1.1307
KDB 447498 D04
Date of Receipt sample..... : 2026-05-18
Date of Test..... : 2026-05-26 to 2026-07-29
Date of Issue..... : 2026-08-03
Report Form No..... : WTX_Part 1_1307W
Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

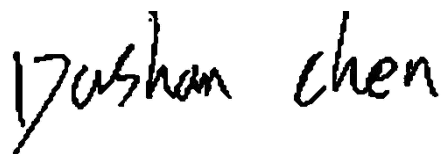
Prepared By:

Waltek Testing Group (Shenzhen) Co., Ltd.

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Tested by:



Dashan Chen/Project Engineer

Approved by:



Jason Su/Manager

1 General Information

General Description of EUT	
Product Name:	Camera G510 (Battery)
Trade Name:	Aqara
Model No.:	CH-C33D
Adding Model(s):	CH-C33E
Rated Voltage:	Battery:DC3.65V Type-C:DC5V
Battery Capacity:	9800mAh
Power Adapter:	/
Equipment Type:	Fixed device

Technical Characteristics of EUT	
Bluetooth	
Bluetooth Version:	V5.4 (LE mode)
Frequency Range:	2402-2480MHz
RF Output Power:	1Mbps: 7.67dBm (Conducted) 2Mbps: 7.61dBm (Conducted)
Data Rate:	1Mbps, 2Mbps
Modulation:	GFSK
Quantity of Channels:	40
Channel Separation:	2MHz
Type of Antenna:	FPC Antenna
Antenna Gain:	1.75dBi
Wi-Fi 2.4G	
Support Standards:	802.11b, 802.11g, 802.11n, 802.11ax
Frequency Range:	2412-2462MHz for 802.11b/g/n/ax(HT/HE20) 2422-2452MHz for 802.11n/ax(HT/HE40)
RF Output Power:	15.87dBm (Conducted)
Type of Modulation:	CCK, OFDM, QPSK, BPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Quantity of Channels:	11 for 802.11b/g/n/ax(HT/HE20); 7 for 802.11n/ax(HT/HE40)
Channel Separation:	5MHz
Type of Antenna:	FPC Antenna
Antenna Gain:	1.75dBi
Wi-Fi 5G	
Support Standards:	802.11a, 802.11n(HT20), 802.11n-HT40, 802.11ac-VHT20/40, 802.11ax-HE20/40
Frequency Range:	5745-5825MHz
Max. RF Output Power:	15.57dBm (Conducted)
Type of Modulation:	QPSK, 16QAM, 64QAM, 256QAM, 1024QAM

Type of Antenna:	FPC Antenna
Antenna Gain:	4.48dBi
Radar	
Frequency Range:	57GHz to 64GHz
Max. RF Output Power:	9.11dBm (EIRP)
Type of Modulation:	FMCW(Frequency Modulated Continuous Wave)
Type of Antenna:	Antenna in Package
Antenna Gain:	7.17dBi

2 Test Facility

Address of the test laboratory

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990

Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A and the CAB identifier is CN0057.

3 RF Exposure Exemption

According to §1.1307(b)(3) and KDB 447498 D04 Interim General RF Exposure Guidance v01, system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

Option A: FCC Rule Part 1.1307 (b)(3)(i)(A): The available maximum time-averaged power is no more than 1mW, regardless of separation distance.

Option B: FCC Rule Part 1.1307 (b)(3)(i)(B): The available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

Option C: FCC Rule Part 1.1307 (b)(3)(i)(C): The minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters.

Single RF Sources Subject to Routine Environmental Evaluation	
RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$
1.34-30	$3,450 R^2/f^2$
30-300	$3.83 R^2$
300-1,500	$0.0128 R^2 f$
1,500-100,000	$19.2 R^2$

For Multiple RF sources: FCC Rule Part 1.1307(b)(3)(ii):

- (A) The available maximum time-averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required).
- (B) In the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

4 Calculated Result

Radio Access Technology	Prediction Frequency	Output Power	Antenna Gain	Duty Cycle	Tune-Up Time-Averaged Power	ERP
	(MHz)	(dBm)	(dBi)	(%)	(dBm)	(dBm)
Bluetooth LE	2402	7.67	1.75	100	8.00	7.60
Wi-Fi 2.4G	2412	15.87	1.75	100	16.00	15.60
Wi-Fi 5G	5745	15.57	4.48	100	16.00	18.33
Radar	61236.6	1.94	7.17	100	2.00	7.02

Frequency (MHz)	Option	Min. Distance	Max. Power		Exposure Limit	Ratio	Result
		(cm)	(dBm)	(mW)	(mW)		Pass/Fail
2402	C	20.00	7.60	5.75	768.00	0.01	Pass
2412	C	20.00	15.60	36.31	768.00	0.05	Pass
5745	C	20.00	18.33	68.08	768.00	0.09	Pass
61236.6	C	20.00	7.02	5.04	768.00	0.01	Pass

Note: 1. Time-Averaged Power=Output Power * Duty Cycle; ERP= Time-Averaged Power+ Antenna gain-2.15dB

2. Option A, B and C refers as clause 1.2.

3. For option B, Max (time-averaged power, effective radiated power (ERP)) converts to Max. Power. For option C, ERP converts to Max. Power;

4. For option B, P_{th} (mW) converts to Exposure Limit (mW); For option C, ERP (W) converts to Exposure Limit (mW).

5. Ratio= Tune-Up ERP (mW)/ Exposure Limit (mW)

Mode for Simultaneous Multi-band Transmission:

Radio Access Technology	Ratio 1	Ratio 2	Simultaneous Ratio	Limit	Result
					Pass/Fail
WIFI 5G + Radar	0.09	0.01	0.1	1	Pass

Note: Bluetooth and Wi-Fi can't transmit at the same time.

Result: Pass